

BEFORE THE  
**Federal Communications Commission**

WASHINGTON, D.C. 20554

|                                   |   |                        |
|-----------------------------------|---|------------------------|
| In Re: Applications of            | ) | MM Docket No. 93-156   |
|                                   | ) |                        |
| TRINITY CHRISTIAN CENTER OF SANTA | ) | File No. BRCT-911129KR |
| ANA, INC.. d/b/a TRINITY BROAD-   | ) |                        |
| CASTING NETWORK                   | ) |                        |
| For Renewal of License of         | ) |                        |
| Station WHSG(TV), Monroe, Georgia | ) |                        |
|                                   | ) |                        |
| and                               | ) |                        |
|                                   | ) |                        |
| GLENDALE BROADCASTING COMPANY     | ) | File No. BPCT-920228KE |
| For Construction Permit           | ) |                        |
| Monroe, Georgia                   | ) |                        |
| TO: The Honorable Joseph Chachkin |   |                        |
| Administrative Law Judge          |   |                        |

**WRITTEN DIRECT CASE OF TRINITY CHRISTIAN CENTER OF**  
**SANTA ANA, INC., d/b/a TRINITY BROADCASTING NETWORK**  
**(TRINITY EXHIBIT 36)**

Submitted by:

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Attorneys for Trinity Christian  
Center of Santa Ana, Inc., d/b/a  
Trinity Broadcasting Network

April 26, 1994



**DECLARATION OF KEVIN T. FISHER**

1. My name is Kevin T. Fisher. I reside at 16132 Olmstead Lane, Woodbridge, Virginia 22191. I am a consulting engineer with the firm of Smith and Powstenko, in Washington, D.C. with whom I have been associated since 1982. I have prepared many applications for television stations which have been granted by the FCC, and my qualifications are a matter of record with the agency.

2. Smith and Powstenko has been retained by Trinity Christian Center of Santa Ana, Inc., d/b/a Trinity Broadcasting Network ("TBN" or "Trinity") to provide the Federal Communications Commission with data concerning certain technical issues which have been designated in MM Docket No. 93-156.

3. I have attached at Tab A a map showing where a channel 63 transmitter may be located for a channel 63 facility to serve Monroe, Georgia, consistent with the Commission's mileage separation rules, specifically, the city reference coordinates for the now unused allocation of noncommercial channel 63, Montgomery, Alabama. According to Section 73.611(b) of the rules, the reference coordinates for any allocation are the site coordinates specified in the construction permit or license, or, if no application is pending or granted, the coordinates of the community of license. The map attached at Tab A shows that there is an area in excess of 1,200 square miles where a transmitter site for

**Federal Communications Commission**

Decision No. 13-156 Exhibit No. 36

Presented by Trinity

W. M. Brown 5-18-94

Or. position

Identified 5-17-94  
Received \_\_\_\_\_  
Rejected \_\_\_\_\_

Reporter AWW

Date 5-17-94

channel 63 may be located consistent with Commission mileage separation requirements, yet still provide the necessary city grade coverage (80 dBu) to Monroe.

4. Also shown on the map at Tab A is the site proposed by Glendale Broadcasting Company ("Glendale") in its March 5, 1993 amendment to its application for construction permit, BPCT-920228KE. Glendale's site is clearly outside the area where a site could be located consistent with the mileage separation rules, and is, in fact, short-spaced to the Montgomery allocation by 11.4 miles or 18.4 kilometers.

5. WHSG-TV, channel 63, is short-spaced to the Montgomery allocation by 11.3 miles (or 18.1 kilometers). I have reviewed the pertinent Commission files for Trinity, its predecessor in interest, Monroe Television, Inc. ("Monroe TV"), and the previous holder of a construction permit for WTSU-TV, channel 63, in Montgomery, Alabama, Troy State University System ("Troy State"), to determine how WHSG-TV's short-spaced site was approved by the Commission. In 1989 Monroe TV and Troy State entered into an agreement whereby Troy State agreed to move its then authorized site to a fully spaced site, a modification application was filed specifying that site at 32° 17' 24" N, 86° 36' 40" W (BMPET-890901KE). Likewise, soon thereafter, the Commission granted Monroe TV's application (BMPCT-890809KE) specifying the site

presently used by WHSG-TV at 33° 44' 22" N, 84° 00' 14" W. The distance between these two sites is 181.4 miles (292 km). Section 73.611 of the Commission's Rules states that "[s]tation separations in licensing proceedings shall be determined by the distance between the coordinates of the proposed transmitter site in one community and (1) [t]he coordinates of an authorized transmitter site for the pertinent channel in the other community." Section 73.610 (b) indicates that the minimum co-channel station separation that applies is 174.5 miles (280.8 km). Accordingly, when the Commission granted WHSG-TV's modification application the sites specified met the minimum mileage separations by nearly seven (7) miles.

6. Troy State did not construct the Montgomery facility and its authorization was subsequently cancelled by the Commission. Because the authorization was cancelled, the reference coordinates reverted from Troy State's authorized site to the center city coordinates for Montgomery. The purpose for this FCC policy is, I believe, to preserve the largest possible area for a new applicant for the allocation to locate its transmitter site to serve that community. WHSG-TV's site is short-spaced to the reference coordinates for Montgomery by 11.3 miles, or 18.1 km, but, as a licensed facility, it is "grandfathered" and not required to relocate its constructed facilities to meet the new mileage

separations caused by the relocation of the Montgomery allocation reference coordinates.

7. As shown by the map at Tab A, the tower now used by WFOX (FM) is within the 1,200 square mile area where a site could be located for channel 63, Monroe consistent with the Commission's mileage separation rules and provide city grade coverage to Monroe. I have reviewed the August 2, 1993 statement of Randy Mullinax, the Chief Engineer of Shamrock Broadcasting, the owner of WFOX (FM), licensed to Gainesville, Georgia, which was submitted in this proceeding on August 3, 1993. Assuming that Mr. Mullinax' sworn statement is true, he indicates that space is available for a television antenna at the 491 meter ( 1,611 feet) level on the WFOX tower and that the tower can accommodate a TV antenna at that height.

8. I calculated what the coverage would be for a channel 63 facility located on the WFOX tower (34° 07' 32" N, 83° 51' 31" W) at 753 meters above mean sea level ("AMSL"), or 2470 feet AMSL, using the same methods that I use in calculating coverage for an FCC Form 301 application. To maximize total area and population coverage from the site I assumed an omnidirectional antenna with an ERP of 5,000 kilowatts. Glendale's March 5, 1993 amendment specifies a directional antenna with an ERP of 5,000 kW, which means that along certain radials the ERP is less than 5,000

kilowatts. Since the antenna is side-mounted at the 491 meter (1,611 foot) level on an existing 538 meter facility, no FAA notification would be required. I also calculated the potential RF radiation hazard for such a facility. Assuming an antenna vertical relative field value of 20 percent at the steeper elevation angles, the calculated levels of power density at ground level from the assumed WFOX facility would represent less than one percent of the current FCC guideline for stations operating on channel 63. Such a proposal would, therefore, be excluded from consideration with respect to public exposure to nonionizing electromagnetic radiation. The licensee of channel 63 at the WFOX site would be required to comply with the standard condition to coordinate with other users of the tower to avoid excessive levels of occupational exposure to RF radiation any time workers would be in the vicinity of the antenna's aperture.

9. The calculated terrain and contour data for channel 63 operating at the WFOX site is shown at Tab B. I also calculated the area and population coverage of such a facility from the WFOX site using the same methods used in calculating the area and population within the Grade B contour in response to Section V-C, question 17, FCC Form 301. The area is calculated using a computer. This coverage is shown in the map attached at Tab C ("WFOX Coverage Map").



10. A review of the WFOX Coverage Map shows that the city grade, or 80 dBu, contour, easily encompasses the city of Monroe. Moreover, the area and population within the calculated grade B contour is 24,468 square kilometers and 3,181,146 persons, respectively.

11. The engineering data in Glendale's March 5, 1993 amendment to BPCT-920228KE specifies an area and population within the Grade B contour of 19,970 square kilometers and 3,141,015 persons.<sup>1</sup> Thus, channel 63 operating from the WFOX site would cover both a greater area (over 4,500 square kilometers) and a higher population (more than 40,000) than would Glendale's specified operation.

12. The Grade B contours of WHSG-TV, Glendale's original proposal, Glendale's amended proposal (as amended March 5, 1993). and channel 63 operating from the WFOX site are plotted on the map at Tab D. The map at Tab E shows these Grade B contours in addition to the Grade B contours of all other authorized commercial television services serving the area. The tabulation at Tab F

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<sup>1</sup>. I also calculated the area and population within Glendale's Grade B contour using the same methods that I would use in responding to Section V-C, Question 17, FCC Form 301. I calculated the area and population covered from Glendale's specified site as 19,938 square kilometers and 3,133,021 persons, respectively. I used Glendale's figures for comparison purposes because Glendale's figures are slightly larger, and the differences between Glendale's figures and my own were not significant.

lists the other television services included in this study. My study shows that channel 63 operating from the WFOX site will serve significant areas which is now unserved (receives no off-the-air television service) or are underserved (receive four or fewer off-the-air television services). A tabulation of the area and population data unique to each proposal, comparing unserved and underserved areas and populations served from the WFOX site and Glendale's specified site, is attached at Tab G.

13. As with the WFOX site proposal, the contours of the other services were calculated by me, based upon the station's ERP (and directional antenna, if necessary), its radiation center AMSL, the NOAA's 30-second terrain data base, and a computer program which utilizes the FCC's F(50,50) curves for television signal propagation.

14. Area figures were determined by polar planimeter, taking into account the appropriate map scale factor. Population figures are based upon the 1990 U.S. Census, and are based upon uniform population distribution within minor civil divisions.

15. My study shows that the WFOX site would provide coverage to significant areas and populations which now receive no over-the-air television service, commonly called "White Area," and which receive only one over-the-air commercial television service, commonly called "Gray Area." The WFOX site proposal would provide

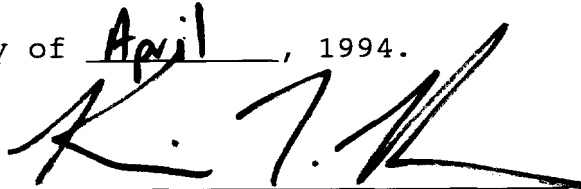
service to a white area of 182 square kilometers with a population of 4,921. The WFOX site proposal's advantage in gray area service is even greater, providing a second service in an area of 962 square kilometers with a population of 11,634. Glendale's proposal does not provide any service to white or gray areas. In addition, the WFOX site proposal serves even greater areas and populations which now receive only two or three over-the-air television services. Glendale's proposal does not provide any new service to areas which now receive two or three over-the-air television services.

16. Glendale's proposal does serve an area and population which is now underserved, i.e., now receives four over-the-air television services, with an area of 10 square kilometers and a population of 864. Even in this category (fifth service), however, the WFOX site is clearly superior, and would provide a fifth over-the-air television service to an area of 1,569 square kilometers with a population of 23,423.

**SUPPORTING DECLARATION**

I, Kevin T. Fisher, hereby swear under penalty of perjury of the laws of the United States and the District of Columbia that the foregoing "Declaration of Kevin T. Fisher," prepared for submission to the Federal Communications Commission in connection with MM Docket Number 93-156, consisting of eight (8) pages and attachments, is true and correct to the best of my knowledge and belief.

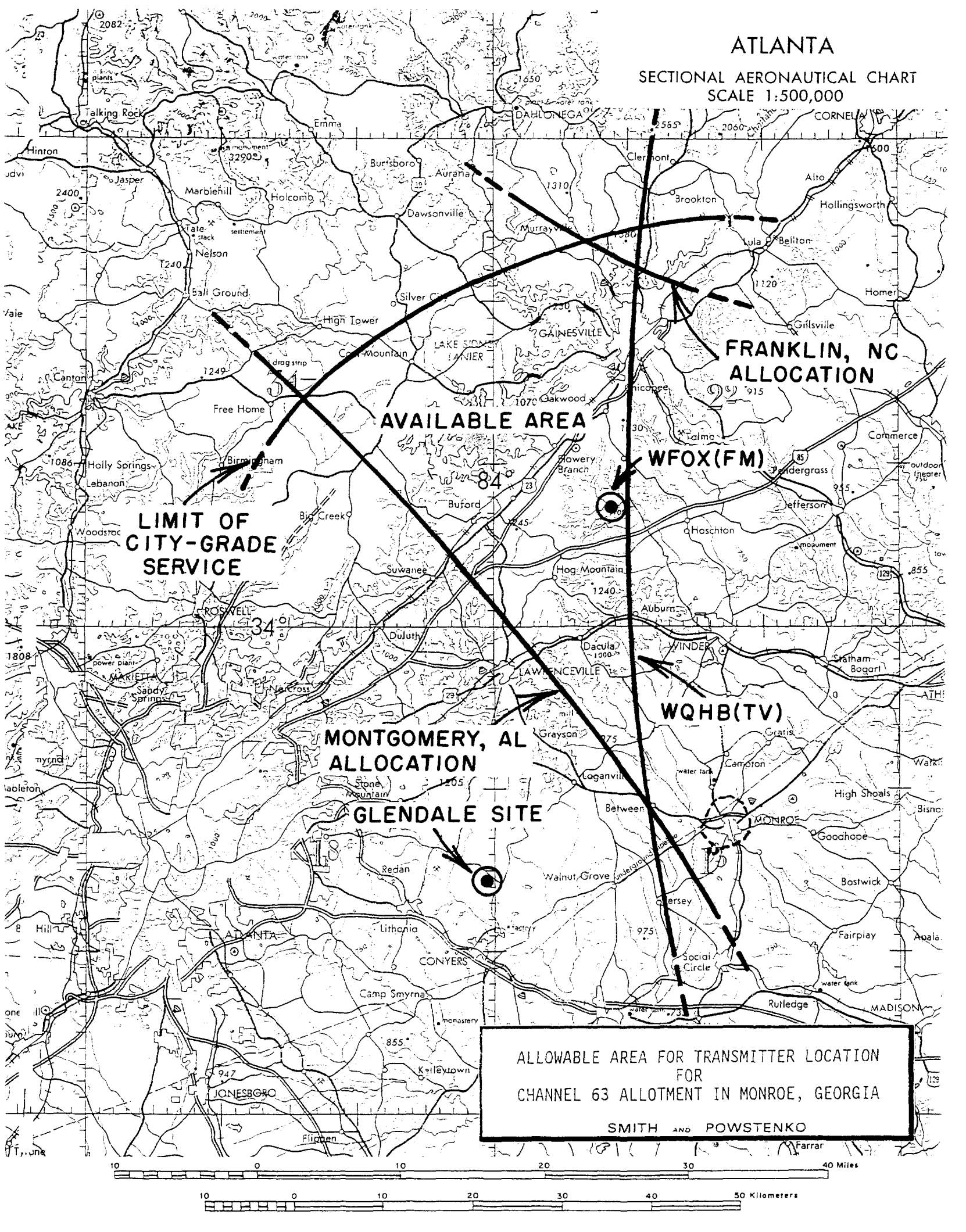
Executed this 26<sup>th</sup> day of April, 1994.

  
Kevin T. Fisher



# ATLANTA

SECTIONAL AERONAUTICAL CHART  
SCALE 1:500,000



ALLOWABLE AREA FOR TRANSMITTER LOCATION  
FOR  
CHANNEL 63 ALLOTMENT IN MONROE, GEORGIA

SMITH AND POWSTENKO



SMITH AND POWSTENKO

TERRAIN AND CONTOUR DATA FOR  
ASSUMED WFOX-SITE PROPOSAL

Channel: 63 C/R 753.0 meters ( 2470.5 feet) A.M.S.L. Latitude: 34-07-32  
Longitude: 83-51-31

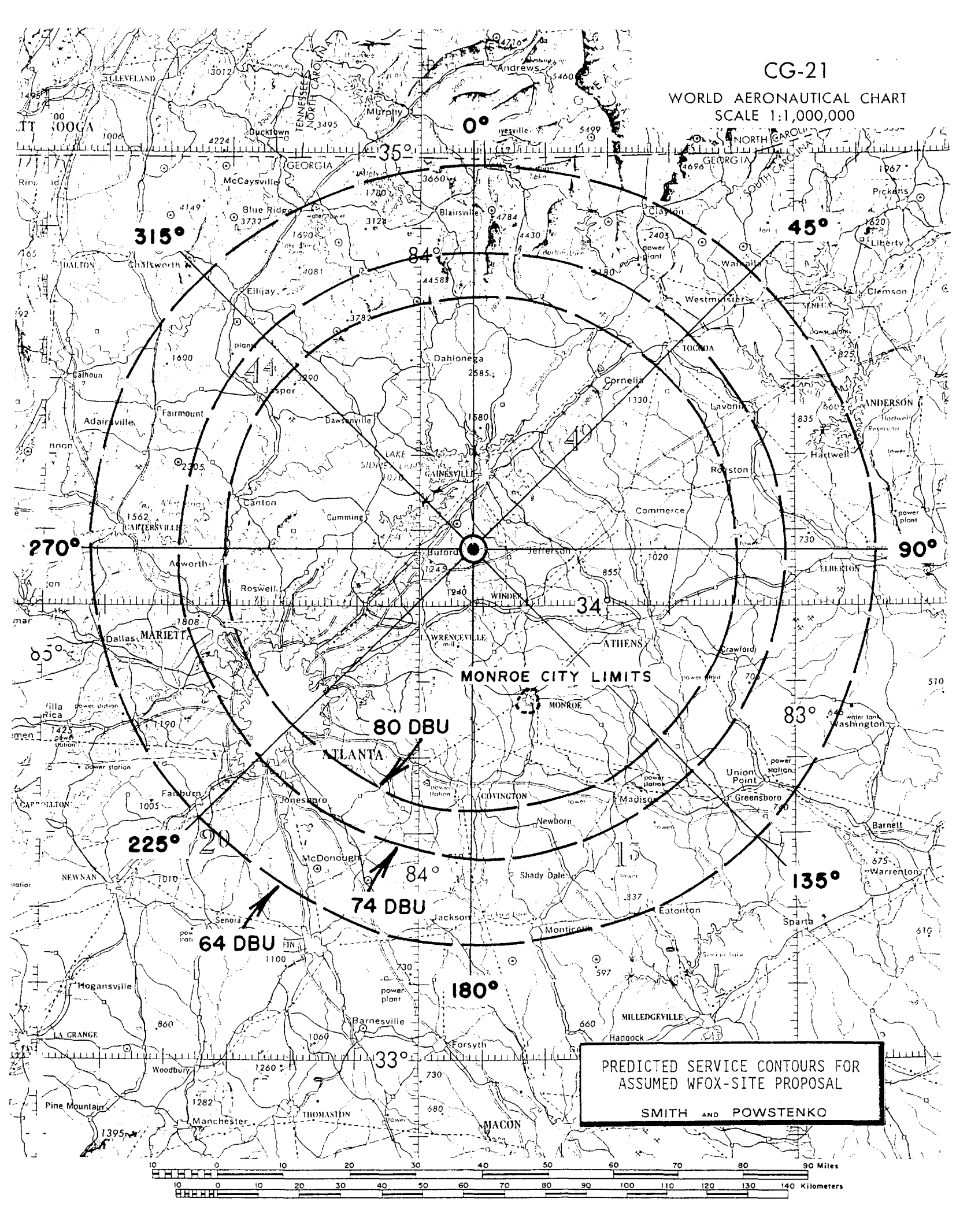
| Bearing<br>(degrees) | HAAT<br>(meters)<br>(feet) | ERP<br>(kW)<br>(dBk) | Depression<br>angle<br>(degrees) | 80 dBu<br>( 10 mV/m)<br>contour | 74 dBu<br>(5.01 mV/m)<br>contour | 64 dBu<br>(1.58 mV/m)<br>contour |
|----------------------|----------------------------|----------------------|----------------------------------|---------------------------------|----------------------------------|----------------------------------|
| .0                   | 400.0<br>1312.3            | 5000<br>36.99        | .554                             | 61.0 km<br>37.9 mi              | 71.4 km<br>44.4 mi               | 92.3 km<br>57.4 mi               |
| 45.0                 | 447.5<br>1468.2            | 5000<br>36.99        | .586                             | 63.4 km<br>39.4 mi              | 74.3 km<br>46.1 mi               | 95.8 km<br>59.5 mi               |
| 90.0                 | 478.3<br>1569.2            | 5000<br>36.99        | .606                             | 64.7 km<br>40.2 mi              | 75.7 km<br>47.1 mi               | 98.2 km<br>61.0 mi               |
| 135.0                | 482.3<br>1582.3            | 5000<br>36.99        | .608                             | 64.8 km<br>40.3 mi              | 75.9 km<br>47.2 mi               | 98.5 km<br>61.2 mi               |
| 180.0                | 457.9<br>1502.3            | 5000<br>36.99        | .593                             | 63.9 km<br>39.7 mi              | 74.8 km<br>46.5 mi               | 96.6 km<br>60.0 mi               |
| 225.0                | 411.7<br>1350.7            | 5000<br>36.99        | .562                             | 61.7 km<br>38.3 mi              | 72.2 km<br>44.9 mi               | 93.1 km<br>57.9 mi               |
| 270.0                | 409.1<br>1342.2            | 5000<br>36.99        | .560                             | 61.5 km<br>38.2 mi              | 72.0 km<br>44.7 mi               | 93.0 km<br>57.8 mi               |
| 315.0                | 418.2<br>1372.0            | 5000<br>36.99        | .566                             | 62.0 km<br>38.5 mi              | 72.6 km<br>45.1 mi               | 93.6 km<br>58.2 mi               |
| HAAT:                | 438.1<br>1437.4            |                      |                                  |                                 |                                  |                                  |





CG-21

WORLD AERONAUTICAL CHART  
SCALE 1:1,000,000



MONROE CITY LIMITS

ATLANTA

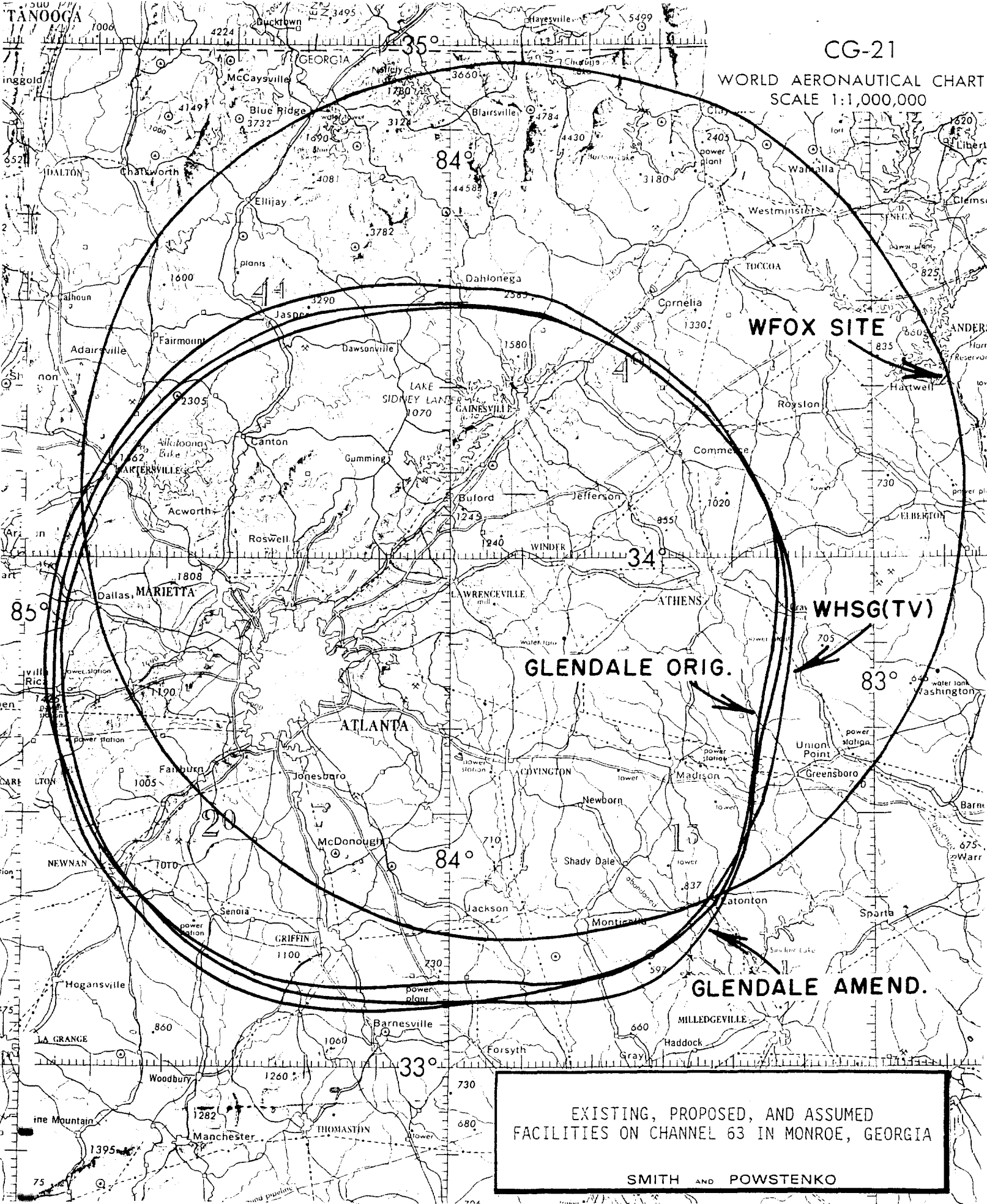
MONROE

COVINGTON

PREDICTED SERVICE CONTOURS FOR  
ASSUMED WFOX-SITE PROPOSAL

SMITH AND POWSTENKO

**D**



CG-21

WORLD AERONAUTICAL CHART  
SCALE 1:1,000,000

WFOV SITE

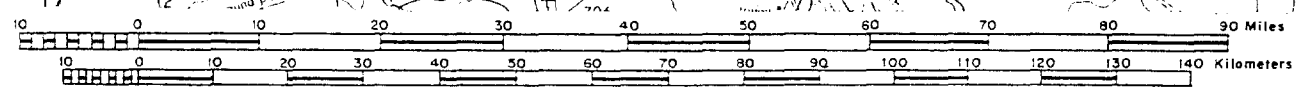
WHSG(TV)

GLENDAL ORIG.

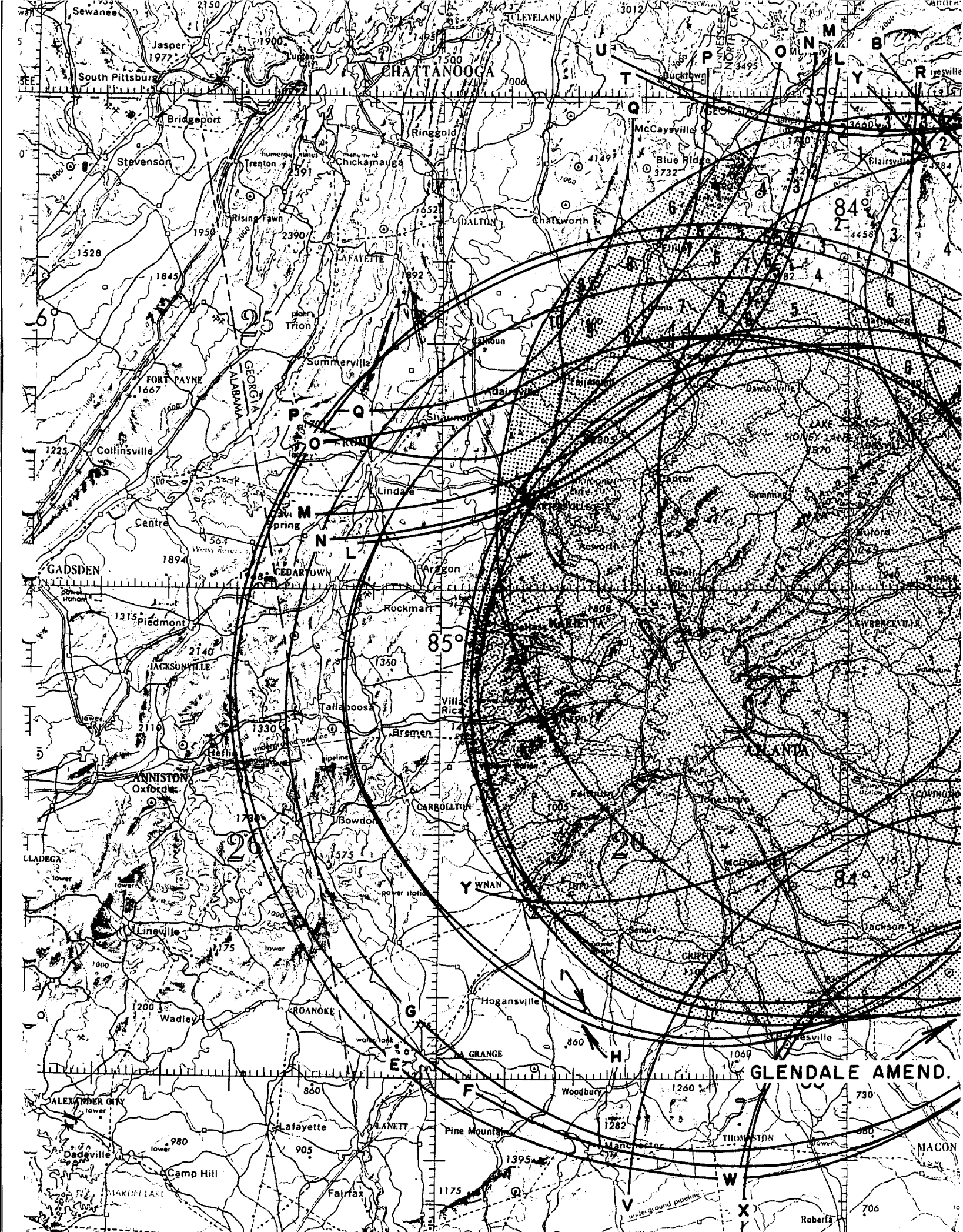
GLENDAL AMEND.

EXISTING, PROPOSED, AND ASSUMED  
FACILITIES ON CHANNEL 63 IN MONROE, GEORGIA

SMITH AND POWSTENKO



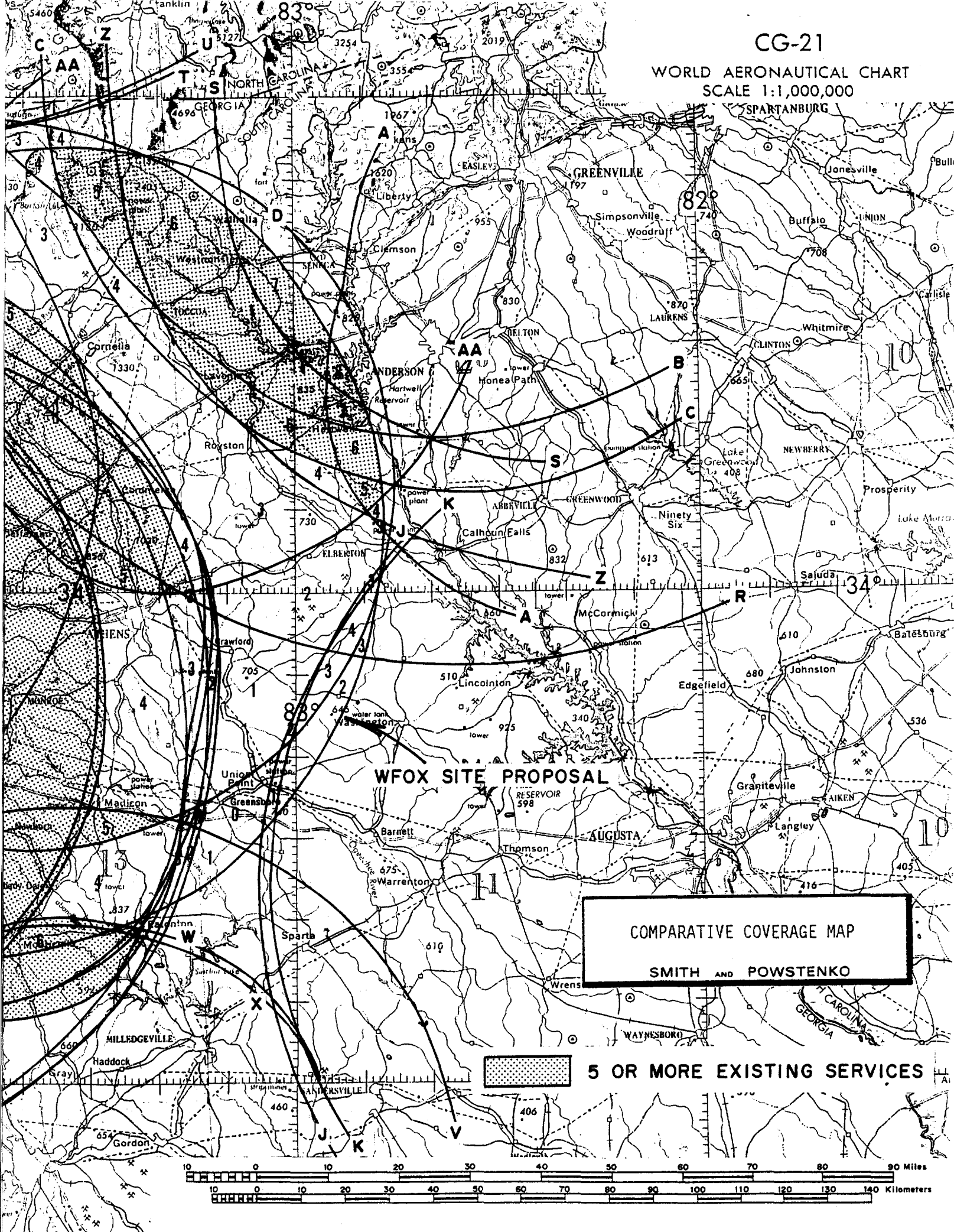




CG-21

WORLD AERONAUTICAL CHART

SCALE 1:1,000,000

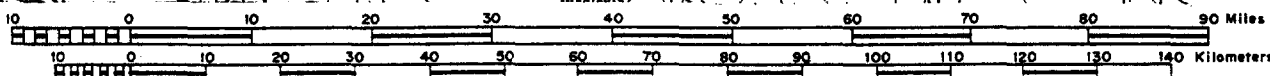


WFOX SITE PROPOSAL

COMPARATIVE COVERAGE MAP

SMITH AND POWSTENKO

5 OR MORE EXISTING SERVICES



**F**



AUTHORIZED COMMERCIAL TELEVISION SERVICES  
INCLUDED IN COMPARATIVE COVERAGE STUDY

| <u>Map Key</u> | <u>Call Sign</u> | <u>City, State</u> | <u>CH.</u> | <u>Power(kw)/RCAMSL(ft.)</u> |
|----------------|------------------|--------------------|------------|------------------------------|
| A              | WAXA             | Anderson, S. C.    | 40         | 2570/1817                    |
| B              | WLOS             | Asheville, N. C.   | 13         | 178/6023                     |
| C              | WHNS             | Asheville, N. C.   | 21         | 3390/5019                    |
| D              | WNGM-TV          | Athens, Ga.        | 34         | 1260/2188                    |
| E              | WSB-TV           | Atlanta, Ga.       | 2          | 100/1994                     |
| F              | WAGA-TV          | Atlanta, Ga.       | 5          | 100/2011                     |
| G              | WXIA-TV          | Atlanta, Ga.       | 11         | 316/2004                     |
| H              | WATL             | Atlanta, Ga.       | 36         | 2690/2024                    |
| I              | WGNX             | Atlanta, Ga.       | 46         | 2340/2050                    |
| J              | WJBF             | Augusta, Ga.       | 6          | 100/1630                     |
| K              | WRDW-TV          | Augusta, Ga.       | 12         | 316/1820                     |
| L              | WRCB-TV          | Chattanooga, Tn.   | 3          | 100/2312                     |
| M              | WTVC             | Chattanooga, Tn.   | 9          | 316/2332                     |
| N              | WDEF-TV          | Chattanooga, Tn.   | 12         | 316/2516                     |
| O              | WDSI-TV          | Chattanooga, Tn.   | 61         | 5000/2522                    |
| P              | WFLI             | Cleveland, Tn.     | 53         | 1320/2024                    |
| Q              | WELF             | Dalton, Ga.        | 23         | 490/2486                     |
| R              | WYFF             | Greenville, S. C.  | 4          | 100/3933                     |
| S              | WGGS-TV          | Greenville, S. C.  | 16         | 1120/2185                    |
| T              | WATE-TV          | Knoxville, Tn.     | 6          | 100/2503                     |
| U              | WBIR-TV          | Knoxville, Tn.     | 10         | 316/2808                     |
| V              | WMAZ-TV          | Macon, Ga.         | 13         | 316/1154                     |
| W              | WGXA             | Macon, Ga.         | 24         | 1290/1174                    |
| X              | WMGT             | Macon, Ga.         | 41         | 1050/1151                    |
| Y              | WTLK-TV          | Rome, Ga.          | 14         | 4570/3087                    |
| Z              | WSPA-TV          | Spartanburg, S. C. | 7          | 316/3405                     |
| AA             | WNEG-TV          | Toccoa, Ga.        | 32         | 646/1998                     |